

Title (en)
Optical space switch.

Title (de)
Räumlicher optischer Schalter.

Title (fr)
Commutateur optique spatial.

Publication
EP 0279679 A1 19880824 (EN)

Application
EP 88301394 A 19880218

Priority
GB 8704016 A 19870220

Abstract (en)
An optical space switch is used in a centralised switching system for an optical network and connects light from one of a number of inputs (1) to a selected one of a number of outputs (6). The switch includes a number of multiplexed phase volume holograms (4), a spatial light modulator (3) for imposing a selected phase change on light passing through it, distribution means (2) for coupling light from the inputs (1) via the spatial light modulator (3) to the multiplexed phase volume holograms (4), and collection means (5) for collecting light diffracted by the multiplexed phase volume holograms (4). Each multiplexed phase volume hologram (4) diffracts light to a selected output (6) in dependence upon the phase change imposed by the spatial light modulator (3) on the light incident upon that hologram (4).

IPC 1-7
H04J 14/00; H04Q 3/52

IPC 8 full level
G02F 1/01 (2006.01); **G02F 1/31** (2006.01); **G02F 1/33** (2006.01); **G03H 1/00** (2006.01); **H04B 10/02** (2006.01); **H04B 10/2581** (2013.01); **H04B 10/27** (2013.01); **H04J 14/00** (2006.01); **H04Q 3/52** (2006.01)

CPC (source: EP US)
G02B 6/354 (2013.01 - EP US); **G03H 1/0005** (2013.01 - EP US)

Citation (search report)

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- [A] PROCEEDINGS OF THE INTERNATIONAL SWITCHING SYMPOSIUM, Florence, 7th-11th May 1984, session 41A, paper 5, page 1, North-Holland Publ. CO., Amsterdam, NL; P. GRAVEY et al.: "Optical switching technologies for high capacity exchanges"

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